

# SEQUENCE LISTING

<110> Buck, Linda  
Axel, Richard

<120> ODORANT RECEPTORS AND USES THEREOF

<130> 0575/38586-B/JPW/ADM

<150> US 08/129,079

<151> 1993-10-05

<160> 80

<170> PatentIn version 3.0

<210> 1

<211> 954

<212> DNA

<213> Rattus sp. F12

<400> 1

atggaatcag ggaacagcac aagaagattt tcaagttttt ttcttcttgg atttacagaa 60  
aaccacaac ttcacttctt catttttgc ctattcctgt ccatgtacct ggtaacagtg 120  
cttggaacc tgcttatcat tatggccatc atcacacagt ctcatttgca tacacccatg 180  
tactttttcc ttgctaacct atcctttgtg gacatctgtt tcacctccac caccatccca 240  
aagatgttgg taaatatata caccagagc aagagcatca cctatgaaga ctgtattagc 300  
cagatgtgtg tcttcttggg ttctgcagaa ttgggcaact ttctcctggc tgtgatggcc 360  
tatgaccgat atgtggctaa ctgtcaccca ctgtgttaca cagtcattgt gaaccaccgg 420  
ctctgtatcc tgctgcttct gctgtcctgg gtatcagca ttttccatgc cttcatacag 480  
agcttaattg tgctacagtt gaccttctgt ggagatgtga aaatccctca cttcttctgt 540  
gaacttaatc agctgtccca actcacctgt tcagacaact ttccaagtca cctcataatg 600  
aatcttgtac ctgttatgtt ggcagccatt tcttcagtgc gcctccttta ctcttatttc 660  
aagatagtat cctccatata ttctatctcc acagtcagg ggaagtacaa ggcattttct 720  
acttgtgctt ctcaccttct cattgtctcc ttattttata gtacaggcct cggagtgtac 780  
gtcagttctg ctgtggtcca aagctcacat tctgctgcaa gtgcttcggg catgtatact 840  
gtggtcacc ccatgctgaa ccccttcatt tatagtctaa ggaataaaga tgtgaagaga 900  
gctctggaaa gactgttaga aggaaactgt aaagtgcac attggactgg atga 954

<210> 2

<211> 1002

<212> DNA

<213> Rattus sp. F3

<400> 2  
atggactcaa gcaacaggac aagagtttca gaatttcttc ttcttggatt tgtagaaaac 60  
aaagacctac aaccccttat ttatggctctt tttctctcta tgtacctggt tactgtcatt 120  
ggaaacatat ccattattgt ggctatcatt tcagatccct gtctgcacac ccccatgtat 180  
ttcttctctc ctaacctgtc ctttgtggac atctgtttca tttcaaccac tgttccaaag 240  
atgttagtga acatccagac ccaaaacaat gtcatcacct atgcaggatg cattaccag 300  
atatactttt tcttgtctctt tgtagaattg gacaacttct tgctgactat catggcctat 360  
gaccgttacg tagccatctg tcaccccatg cactacacag ttatcatgaa ctacaagctc 420  
tgtggatttc tgggtctggt atcttggatt gtaagtgttc tgcatgcctt gtttcaaagc 480  
ttgatgatgt tggcgctgcc cttctgcaca catctggaaa tcccacacta cttctgtgaa 540  
cctaatacagg tgattcaact cacctgttct gatgcatttc ttaatgatct tgtgatatat 600  
tttacacttg tgctgctggc tactgttctt cttgctggca tcttctatct ttacttcaag 660  
atagtgtcct ccataatgtgc tatatcgtca gttcatggga agtacaagc attctccacc 720  
tgtgcatctc acctttcagt cgtgtcttta ttttactgca caggactagg agtgtacctc 780  
agttctgctg caaacaacag ctacacaggca agtgccacag cctcagtcac gtacactgta 840  
gttaccctta tgggtgaacc ttttatctat agtcttagga ataaagatgt taagagtgtt 900  
ctgaaaaaaaa ctctttgtga ggaagttata aggagtccac cttccctact tcatttcttc 960  
ctagtgttat gtcatctccc ttgttttatt ttttgttatt aa 1002

<210> 3  
<211> 942  
<212> DNA  
<213> Rattus sp. F5

<400> 3  
atgagcagca ccaaccagtc cagtgtcacc gagttcctcc tcttgggact ctccaggcag 60  
ccccagcagc agcagctcct ctctctgtc ttcctcatca tgtacctggc cactgtcctg 120  
ggaaacctgc tcatcatcct ggctattggc acagactccc gcctgcacac ccccatgtac 180  
ttcttctctc gtaacctgtc ctttgtggat gtctgcttct cctctaccac tgtccctaaa 240  
gttctggcca accatatact tgggagtcag gccatttctt tctctgggtg tctcaccag 300  
ctgtattttc tcgctgtgtt tggtaacatg gacaatttcc tgctggctgt gatgtcctat 360  
gaccgatttg tggccatatg ccaccttta cactacacaa caaagatgac ccgtcagctc 420  
tgtgtcctgc ttgttgtggg gtcatgggtt gtagccaaca tgaattgtct gttgcacata 480

ctgctcatgg ctcgactctc cttctgtgca gacaacatga tcccccaatt cttctgtgat	540
ggaactcccc tectgaaact ctctgtctca gacacacatc tcaatgagct gatgattctt	600
acagaggggag ctgtgggtcat ggtcacccca tttgtctgca tectcatctc ctacatccac	660
atcacctgtg ctgtcctcag agtctcatcc cccaggggag gatggaaatc cttctccacc	720
tgtggctccc acctggctgt ggtctgctc ttctatggca ccgtcatcgc tgtgtatttc	780
aacctatcat cctctcaatt agctgggagg gacatggcag ctgcagtgat gtatgcagtg	840
gtgaccccaa tgctgaacct ttctatctat agcctgagga acagcgacat gaaagcagct	900
ttaaggaaaag tgctcgccat gagatttcca tctaagcagt aa	942

<210> 4  
 <211> 936  
 <212> DNA  
 <213> Rattus sp. F6

<400> 4	
atggccttga gtactggcca gaacctgtcc acaccaggac cattcatctt gctgggcttc	60
ccagggccaa ggagcatgcg cattgggctc ttctgcttt tectggteat gtatctgctt	120
acggtagtgt gaaacctagc catcatctcc ctggtagggtg cccacagatg cctacagaca	180
cccatgtact tcttctctg caacctctcc ttctggaga tctggttcac cacagcctgc	240
gtacccaaga ccttggccac atttgccct cggggtggag tcatttctt ggctggctgt	300
gccacacaga tgtactttgt cttttctttg ggctgtaccg agtacttctt gctggctgtg	360
atggccttatg accgctacct ggccatctgc ctgccactgc gctatgggtg catcatgact	420
cctgggctgg cgatgcggtt ggccctggga tectggctgt gtgggttttc tgcaatcaca	480
gttctctgta cctcattgc ccgcctctct ttctgtggct cactgtcat caaccacttc	540
ttctgtgaca ttctgccttg gatagtgtt ttctgcaccg acacgcagggt ggtggaactg	600
gtgtcctttg gcattgcctt ctgtgttatt ctgggctcgt gtggtatcac actagtctcc	660
tatgcttaca tcatcactac catcatcaag attcctctg cccggggccg gcaccgcgcc	720
ttctcaacct gctcatccca tctcactgtg gtgctgattt ggtatggctc caccatcttc	780
ttgcatgtga ggacctcgt agagagctcc ttggacctca ccaaagctat cacagtgtctc	840
aacaccattg tcacacctgt gctgaacct ttcatatata ctctgaggaa caaggatgtc	900
aaggaagctc tgcgcaggac ggtgaagggg aagtga	936

<210> 5  
 <211> 939  
 <212> DNA

<213> Rattus sp. I14

<400> 5

```
atgactggaa ataaccaaac tttgatcttg gagttcctcc tcctgggtct gcccatccca    60
tcagagtatc atctcctggt ctatgccctg ttcttgcca tgtacctcac catcatcctg    120
ggaaacctgc taatcattgt ccttggtcga ctggactctc atctccacat gcccatgtac    180
ttgtttctca gcaacttggt cttctctgac ctctgctttt cctctgtcac aatgccccaa    240
ttgcttcaga acatgcagag ccaagtacca tctatatact atacaggctg cctgacacag    300
ctgtacttct ttatgggttt tggagatatg gagagcttcc ttcttggtgt catggcctat    360
gaccgctatg tggccatttg ctttcctttg cgttacacca ccatcatgag caccaagttc    420
tgtgcttcac tagtgctact tctgtggatg ctgacgatga cccatgccct gctgcatacc    480
ctactcattg ctagattgtc tttttgtgag aagaatgtga ttcttcactt tttctgtgac    540
atctctgtct ttctgaagtt gtctgtctca gacatttatg ttaatgagct gatgatatat    600
atcttggttg gactcatcat tattatccca ttcctattaa ttgttatgtc ctatgttaga    660
atcttcttct ccattttgaa gtttccatct attcaggaca tctacaaggt attctcaacc    720
tgtgggtccc atctgtctgt ggtgaccttg ttttatggga caatttttgg tatctactta    780
tgtccatcag gtaataattc tactgtgaag gagattgcca tggctatgat gtacacagtg    840
gtgactccca tgctgaatcc cttcatctac agcctgagga acagagacat gaaaagggcc    900
ctaataagag ttatctgcac taagaaaatc tctctgtaa    939
```

<210> 6

<211> 945

<212> DNA

<213> Rattus sp. I15

<400> 6

```
atgacagaag agaaccaaac tgtgatctcc cagttccttc tccttttctt gcccatcccc    60
tcagagcacc agcacgtggt ctacgccctg ttctgtcca tgtacctcac cactgtcctg    120
gggaacctca tcatcatcat cctcattcac ctggactccc atctccacac acccatgtac    180
ttgtttctca gcaacttggt cttctctgat ctctgctttt cctctgttac gatgccaag    240
ttgttgaga acatgcagag ccaagttcca tccatccctt ttgcaggctg cctgacacaa    300
ttatactttt acctgtatgt tgcagacctt gagagcttcc tgcttggtggc catggcctat    360
gaccgctatg tggccatctg cttccccctt cattacatga gcatcatgag ccccaagctc    420
tgtgtgagtc tgggtggtgt gtctgggtgt ctgaccacct tccatgccat gctgcacacc    480
ctgctcatgg ccagattgtc attctgtgct gacaatatga tccccactt tttctgtgat    540
```

atatctcctt tattgaaact gtcctgctct gacacgcatg ttaatgagtt ggtgatattt 600  
 gtcattgggag ggcttggttat tgtcattcca tttgtgctca tcattgtatc ttatgcacga 660  
 gttgtgcct ccattcttaa agtcccttct gtcgaggca tccacaagat cttctccacc 720  
 tgcggctccc atctgtctgt ggtgtcactg ttctatggga caatcattgg tctctactta 780  
 tgtccgtcag ctaataactc tactgtgaag gagactgtca tggccatgat gtacacagtg 840  
 gtgaccccca tgctgaaccc cttcatctac agcctgagga acagagacat gaaagaggca 900  
 ctgataagag tcctttgtaa aaagaaaatt accttctgtc tatga 945

<210> 7  
 <211> 933  
 <212> DNA  
 <213> Rattus sp. I3

<400> 7  
 atgaacaatc aaactttcat cacccaattc cttctcctgg gactgcccac ccctgaagaa 60  
 catcagcacc tgttctatgc cttgttcttg gtcattgtacc tcaccaccat cttgggaaac 120  
 ttgctaatac ttgtacttgt tcaactggac tcccagctcc acacacctat gtatttggtt 180  
 ctgagcaatt tgtctttctc tgatctatgt ttttctcttg tcacaatgcc caagctgctg 240  
 cagaacatga ggagccagga cacatccatt ccctatggag gctgcctggc acaaacatac 300  
 ttctttatgg tttttggaga tatggagagt ttccttcttg tggccatggc ctatgaccgc 360  
 tatgtggcca tctgcttccc tctgcattac accagcatca tgagcccaa gctctgtact 420  
 tgtctagtgc tgttatttgt gatgctgacg acatcccatg ccatgatgca cacactgctt 480  
 gcagcaagat tgtctttttg tgagaacaat gtggtcctca acttcttctg tgacctattt 540  
 gttctcctaa agctggcctg ctgagacact tatattaatg agttgatgat atttatcatg 600  
 agtacactcc tcattattat tccattcttc ctcatgtta tgtcctatgc aaggatcata 660  
 tcctctattc ttaaggttcc atctaccaa ggcatctgca aggtcttctc tacctgtggt 720  
 tcccatctgt ctgtagtacc actgttctat gggacaatta ttggtctcta cttatgtcca 780  
 gcaggtaata attccactgt aaaagagatg gtcattggcca tgatgtacac tgtggtgacc 840  
 cccatgctga atcccttcat ctacagccta aggaatagag atatgaagag ggccctaata 900  
 agagttatct gtagtatgaa aatcactctg taa 933

<210> 8  
 <211> 984  
 <212> DNA  
 <213> Rattus sp. I7

<400> 8  
atggagcgaa ggaaccacag tgggagagtg agtgaatttg tgttgctggg tttcccagct 60  
cctgccccac tgcgagtact actatttttc ctttctcttc tggactatgt gttgggtgttg 120  
actgaaaaca tgctcatcat tatagcaatt aggaaccacc caaccctcca caaacccatg 180  
tattttttct tggctaatat gtcatttctg gagatttggt atgtcactgt tacgattcct 240  
aagatgctcg ctggcttcat tggttccaag gagaaccatg gacagctgat ctcttttgag 300  
gcatgcatga cacaactcta ctttttcctg ggcttgggtt gcacagagtg tgtccttctt 360  
gctgtgatgg cctatgaccg ctatgtggct atctgtcatc cactccacta ccccgctatt 420  
gtcagtagcc ggctatgtgt gcagatggca gctggatcct gggctggagg ttttggtatc 480  
tccatgggta aagttttcct tatttctcgc ctgtcttact gtggcccaa caccatcaac 540  
cactttttct gtgatgtgtc tccattgctc aacctgtcat gactgacat gtccacagca 600  
gagcttacag actttgtcct ggccattttt attctgctgg gaccgctctc tgtcactggg 660  
gcatcctaca tggccatcac aggtgctgtg atgcgcatcc cctcagctgc tggccgccat 720  
aaagcctttt caacctgtgc ctccacctc actgttgtga tcattcttcta tgcagccagt 780  
attttcatct atgccaggcc taaggcactc tcagcttttg acaccaaaa gctgggtctct 840  
gtactctacg ctgtcattgt accgttggtc aatcccatca tctactgctt gcgcaaccaa 900  
gatgtcaaaa gagcgctacg tcgcacgctg cacctggccc aggaccagga ggccaatacc 960  
aacaaaggca gcaaaattgg ttag 984

<210> 9  
<211> 939  
<212> DNA  
<213> Rattus sp. I8

<400> 9  
atgaacaaca aaactgtcat caccatttc ctctctctgg gattgcccac cccccagag 60  
caccagcaac tgttcttttg cctgttcctg atcatgtacc tcaccacctt tctgggaaac 120  
ctgctaattg ttgtccttgt tcaactggac tctcatctcc acacacccat gtacttgttt 180  
ctcagcaact tgtccttctc tgatctctgc ttttctctg ttacaatgct gaaattgctg 240  
caaaatatac agagccaagt accatctata tcctatgcag gatgcctgac acagatatc 300  
ttctttttgt tgtttggcta ccttgggaat ttccttcttg tagccatggc ctatgaccgc 360  
tatgtggcca tctgcttccc tctgcattat accaacaatca tgagccataa gctctgtact 420  
tgtctcctgc tggatatttg gataatgaca tcattctcatg ccatgatgca caccctgctt 480

gcagcaagat tgtctttttg tgagaacaat gtactcctca actttttctg tgacctgttt 540  
 gttctcctaa agttggcctg ctcagacact tatgttaatg agttgatgat acatatcatg 600  
 ggcgtgatca tcattgttat tccattcgtg ctcattgtta taccctatgc caagatcatc 660  
 tccctccattc ttaagggtcc atctactcaa agcattcaca aggtcttctc cacttggtgt 720  
 tctcatctct ctgtggtgtc tctgttctac gggacaatta ttggtctcta tttatgtcca 780  
 tcagggtgata attttagtct aaaggggtct gccatggcta tgatgtacac agtggtaact 840  
 ccaatgctga acccgttcat ctacagccta agaaacagag acatgaagca ggccctaata 900  
 agagttacct gtagcaagaa aatctctctg ccattgtag 939

<210> 10  
 <211> 945  
 <212> DNA  
 <213> Rattus sp. I9

<400> 10  
 atgactagaa gaaaccaaac tgccatctct cagttcttcc ttctgggcct gccattcccc 60  
 ccagagtacc aacacctgtt ctatgccttg ttctggcca tgtacctcac cactctctg 120  
 gggaacctca tcatcatcat cctcattcta ctggactccc atctccacac acccatgtac 180  
 ttgtttctca gcaatttatc ctttgccgac ctctgttttt cctctgtcac aatgcccaag 240  
 ttgttgcaga acatgcagag ccaagttcca tccatccctt atgcagggtg cctggcacag 300  
 atatacttct ttctgttttt tggagacctt ggaaacttcc tgcttgtggc catggcctat 360  
 gaccgctatg tggccatctg cttccccctt cattacatga gcatcatgag ccccaagctc 420  
 tgtgtgagtc tgggtggtgt gtcttgggtg ctgactacct tccatgccat gctgcacacc 480  
 ctgctcatgg ccagattgtc attctgtgag gacagtgtga tccctcacta tttctgtgat 540  
 atgtctactc tgctgaaagt ggcttgttct gacacccatg ataataaatt agcaatattt 600  
 atcttagggg gccctatagt tgtactacct ttcttctca tcattgtttc ttatgcaaga 660  
 attgtttcct ccatcttcaa ggtcccttct tctcaaagca tccataaagc cttctccacc 720  
 tgtggctccc acctgtctgt ggtgtcactg ttctatggga cagtcattgg tctctactta 780  
 tgtccttcag ctaataactc cactgtgaag gagactgtca tgtctttgat gtacacaatg 840  
 gtgacacca tgctgaaccc cttcatctac agcctaagaa acagagacat aaaagatgca 900  
 ttagaaaaaa taatgtgcaa aaagcaaatt ccctccttct tatga 945

<210> 11  
 <211> 645  
 <212> DNA

<213> Homo Sapiens H5

<220>

<221> misc\_feature

<222> ()..()

<223> n = unknown

<400> 11

```
atctgttttg tgtctaccac tgtcccaaag cagctggtga acatccagac acagagcaga      60
gtcatcacct atgcagactg catcacccag atgtgctttt ttatactctt tgtagtgttg      120
gacagcttac tcctgactgt gatggcctat gaccggtttg tggccatctg tcacccctg      180
cactacacag tcattatgag ctctgggctc tgtggactgc tggttctggt gtcctggatc      240
gtgagcatcc tatattctct gttacaaagc ataatggcat tgcagctgct cttctgtaca      300
gaactgaaaa tccctcaatt tttctgtgaa cttaatcagg tcatccacct tgcctgttcc      360
gacactttta ttaatgacat gatgatgaat ttacaagtg tgcctgctggg tgggggatgc      420
ctcgctggaa tattttactn ntactttaag atactttggt gcatatgttc gatctcatca      480
gtcaggggga tgaataaagc actttccacc tgtgcatctc acctctcagt tgtctcctta      540
ttttattgta caggcgtagg tgtgtacctt agttctgctg caaccataa ctcactctca      600
aatgctgcag cctcggtgat gtacactgtg gtcacctcca tgcctg      645
```

<210> 12

<211> 215

<212> PRT

<213> Homo Sapiens H5

<220>

<221> UNSURE

<222> (147)..(147)

<223> x = unknown

<400> 12

```
Ile Cys Phe Val Ser Thr Thr Val Pro Lys Gln Leu Val Asn Ile Gln
1              5              10              15
Thr Gln Ser Arg Val Ile Thr Tyr Ala Asp Cys Ile Thr Gln Met Cys
20              25              30
Phe Phe Ile Leu Phe Val Val Leu Asp Ser Leu Leu Leu Thr Val Met
35              40              45
Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro Leu His Tyr Thr Val
50              55              60
Ile Met Ser Ser Trp Leu Cys Gly Leu Leu Val Leu Val Ser Trp Ile
65              70              75              80
```



Val Ser Ile Leu Tyr Ser Leu Leu Gln Ser Ile Met Ala Leu Gln Leu  
85 90 95

Ser Phe Cys Thr Glu Leu Lys Ile Pro Gln Phe Phe Cys Glu Leu Asn  
100 105 110

Gln Val Ile His Leu Ala Cys Ser Asp Thr Phe Ile Asn Asp Met Met  
115 120 125

Met Asn Phe Thr Ser Val Leu Leu Gly Gly Gly Cys Leu Ala Gly Ile  
130 135 140

Phe Tyr Xaa Tyr Phe Lys Ile Leu Cys Cys Ile Cys Ser Ile Ser Ser  
145 150 155 160

Ala Gln Gly Met Asn Lys Ala Leu Ser Thr Cys Ala Ser His Leu Ser  
165 170 175

Val Val Ser Leu Phe Tyr Cys Thr Gly Val Gly Val Tyr Leu Ser Ser  
180 185 190

Ala Ala Thr His Asn Ser Leu Ser Asn Ala Ala Ala Ser Val Met Tyr  
195 200 205

Thr Val Val Thr Ser Met Leu  
210 215

<210> 13  
<211> 640  
<212> DNA  
<213> Rattus sp. J1

<220>  
<221> misc\_feature  
<222> ()..()  
<223> n = unknown

<400> 13  
catctgcttt acttctgcta gcatcccaaa gatgctagt aatatacaga cgaagaacaa 60  
ggtgatcacc tatgaaggct gcatctccca agtatacttt tcatactctt tggagttttg 120  
gacaactttc ttctcgactg tgatggccta tgaccgatat gtggccatct gtcacccatc 180  
tnactacaca ggatcatcatg aaccnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240  
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300  
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360  
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420  
nnnnnnnnntt tattcttact ctaagatagt ttctccata cgagaaatct catcatcaca 480  
gggaaagtac aagnnattct ccacctgtgc atccacctc tcagttgttt cattattcta 540  
ttctacactt ttgggtgtgt accttagttc ttcttttacc caaaactcac actcaactgc 600

acgggcatct gttatgtaca gtgtgggtcac ccccatgttg

640

<210> 14  
 <211> 213  
 <212> PRT  
 <213> Rattus sp. J1

<220>  
 <221> UNSURE  
 <222> (61)..(165)  
 <223> x = unknown

<400> 14

Ile	Cys	Phe	Thr	Ser	Ala	Ser	Ile	Pro	Lys	Met	Leu	Val	Asn	Ile	Gln
1				5					10					15	
Thr	Lys	Asn	Lys	Val	Ile	Thr	Tyr	Glu	Gly	Cys	Ile	Ser	Gln	Val	Tyr
			20					25					30		
Phe	Ser	Tyr	Ser	Leu	Glu	Phe	Trp	Thr	Thr	Phe	Phe	Ser	Thr	Val	Met
		35					40					45			
Ala	Tyr	Asp	Arg	Tyr	Val	Ala	Ile	Cys	His	Pro	Ser	Xaa	Tyr	Thr	Gly
	50					55					60				
His	His	Glu	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
65					70				75						80
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
				85					90					95	
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
				100					105					110	
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
				115					120					125	
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Tyr
	130					135					140				
Ser	Tyr	Ser	Lys	Ile	Val	Ser	Ser	Ile	Arg	Glu	Ile	Ser	Ser	Ser	Gln
145					150					155					160
Gly	Lys	Tyr	Lys	Xaa	Phe	Ser	Thr	Cys	Ala	Ser	His	Leu	Ser	Val	Val
				165					170					175	
Ser	Leu	Phe	Tyr	Ser	Thr	Leu	Leu	Gly	Val	Tyr	Leu	Ser	Ser	Ser	Phe
			180					185					190		
Thr	Gln	Asn	Ser	His	Ser	Thr	Ala	Arg	Ala	Ser	Val	Met	Tyr	Ser	Val
		195					200					205			
Val	Thr	Pro	Met	Leu											
	210														

<210> 15  
 <211> 636  
 <212> DNA  
 <213> Rattus sp. J2

<400> 15  
 acctccacca ccatcccaaa gatgctggta aatatacaca cccagagcaa tactatcacc 60  
 tatgaagact gtatttccca gatgtttgta ctcttggtt ttggagaact ggacaacttt 120  
 ctctggctg tgatggccta tgatcgatat gtggctatct gtcaccact gtattacaca 180  
 gtcattgtga accaccgact ctgtatcctg ctgcttctgc tgtcctgggt tgtcagcatt 240  
 ttacatgcct tcttacagag ctttaattga ctacagttga ccttctgtgg agatgtgaaa 300  
 atccctcact tcttctgtga gctcaatcag ctgtcccaac tcacatgttc agacaacttt 360  
 ccaagtcacc tcacaatgca tcttgtacct gttatatttg cagctatttc cctcagtgg 420  
 atcctttact cttatttcaa gatagtgtct tccatacgtt ctatgtcctc agttcaaggg 480  
 aagtacaagg cattttctac atgtgcctct cacctttcca ttgtctcctt attttatagt 540  
 acaggcctcg ggggtgtacgt cagttctgct gtgatccgaa gctcacactc ctctgcaagt 600  
 gcttcgggtca tgtatactgt ggtcaccccc atgttg 636

<210> 16  
 <211> 212  
 <212> PRT  
 <213> Rattus sp. J2

<400> 16  
 Thr Ser Thr Thr Ile Pro Lys Met Leu Val Asn Ile His Thr Gln Ser  
 1 5 10 15  
 Asn Thr Ile Thr Tyr Glu Asp Cys Ile Ser Gln Met Phe Val Leu Leu  
 20 25 30  
 Val Phe Gly Glu Leu Asp Asn Phe Leu Leu Ala Val Met Ala Tyr Asp  
 35 40 45  
 Arg Tyr Val Ala Ile Cys His Pro Leu Tyr Tyr Thr Val Ile Val Asn  
 50 55 60  
 His Arg Leu Cys Ile Leu Leu Leu Leu Leu Ser Trp Val Val Ser Ile  
 65 70 75 80  
 Leu His Ala Phe Leu Gln Ser Leu Ile Val Leu Gln Leu Thr Phe Cys  
 85 90 95  
 Gly Asp Val Lys Ile Pro His Phe Phe Cys Glu Leu Asn Gln Leu Ser  
 100 105 110  
 Gln Leu Thr Cys Ser Asp Asn Phe Pro Ser His Leu Thr Met His Leu  
 115 120 125

Val Pro Val Ile Phe Ala Ala Ile Ser Leu Ser Gly Ile Leu Tyr Ser  
 130 135 140

Tyr Phe Lys Ile Val Ser Ser Ile Arg Ser Met Ser Ser Val Gln Gly  
 145 150 155 160

Lys Tyr Lys Ala Phe Ser Thr Cys Ala Ser His Leu Ser Ile Val Ser  
 165 170 175

Leu Phe Tyr Ser Thr Gly Leu Gly Val Tyr Val Ser Ser Ala Val Ile  
 180 185 190

Arg Ser Ser His Ser Ser Ala Ser Ala Ser Val Met Tyr Thr Val Val  
 195 200 205

Thr Pro Met Leu  
 210

<210> 17  
 <211> 646  
 <212> DNA  
 <213> Rattus sp. J4

<400> 17  
 cataggctat tcatcttctg tcacacccaa tatgcttgtc aacttcctta taaagcaaaa 60  
 taccatctca taccttggat gttctataca gtttggctca gctgctttgt ttggaggtct 120  
 tgaatgcttc cttctggctg ccatggcgta tgatcgtttt gtagcaatct gcaaccact 180  
 gctttattca acgaaaatgt ccacacaagt ctgtgtccag ttggttgtgg gatcttatat 240  
 agggggattt cttaatgcct cctcttttac cctttccttt ttttccttgt ccttctgtgg 300  
 accaaataga atcaatcact tttactgtga ttttgcctcg ttagtagaac tttcttgtctc 360  
 tgatgtcagt gttcctgatg ctgttacctc attttctgct gcctcagtta ctatgctcac 420  
 agtgtttatc atagccatct cctataccta taccctcatc accatcctga agatgcgttc 480  
 cactgagggt cgacagaaag cattctctac ctgcacttcc cacctcactg cagtcaactct 540  
 gtgctatgga accatcacat tcatctatgt gatgcccaag tccagctact ccacagacca 600  
 gaacaagggtg gtgtctgtgt tttatatggt ggtgatcccc atgttg 646

<210> 18  
 <211> 215  
 <212> PRT  
 <213> Rattus sp. J4

<400> 18

Ile Gly Tyr Ser Ser Ser Val Thr Pro Asn Met Leu Val Asn Phe Leu  
 1 5 10 15

Ile Lys Gln Asn Thr Ile Ser Tyr Leu Gly Cys Ser Ile Gln Phe Gly



<210> 20  
 <211> 160  
 <212> PRT  
 <213> Rattus sp. J7

<400> 20

Ile Cys Lys Pro Leu His Tyr Thr Thr Ile Met Asn Asn Arg Val Cys  
 1 5 10 15

Thr Val Leu Val Leu Ser Cys Trp Phe Ala Gly Leu Leu Ile Ile Leu  
 20 25 30

Pro Pro Leu Gly His Gly Leu Gln Leu Glu Phe Cys Asp Ser Asn Val  
 35 40 45

Ile Asp His Phe Gly Cys Asp Ala Ser Pro Ile Leu Gln Ile Thr Cys  
 50 55 60

Ser Asp Thr Val Phe Ile Glu Lys Ile Val Leu Ala Phe Ala Ile Leu  
 65 70 75 80

Thr Leu Ile Ile Thr Leu Val Cys Val Val Leu Ser Tyr Thr Tyr Ile  
 85 90 95

Ile Lys Thr Ile Leu Lys Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala  
 100 105 110

Phe Ser Thr Cys Ser Ser His Met Ile Val Val Ser Ile Thr Tyr Gly  
 115 120 125

Ser Cys Ile Phe Ile Tyr Ile Lys Pro Ser Ala Lys Glu Gly Val Ala  
 130 135 140

Ile Asn Lys Val Val Ser Val Leu Thr Thr Ser Val Ala Pro Leu Leu  
 145 150 155 160

<210> 21  
 <211> 481  
 <212> DNA  
 <213> Rattus sp. J8

<220>  
 <221> misc\_feature  
 <222> ()..()  
 <223> n = unknown

<400> 21  
 catctgccac ccgctccact actctcttct catgagtcct gacaactgtg ctgctctggt 60  
 aacagtctcc tgggtgacag ggggtgggcac gggcttctctg ccttcctcc tgatttctaa 120  
 gttggacttc tgtgggcca accgcatcaa ccatttcttc tgtgacctcc ctccattaat 180

ccagctgtcc tgcctccagcg tctttgtgac agaaatggcc atctttgtcc tgtccatcgc 240  
 tgtgctctgc atctgtttcc tctaaccn nnnntcctac attttcatag tgtcctccat 300  
 tctgagaatc ccttccacta ccggcaggat gaagacattt tctacatgtg tctcccacct 360  
 ggccgtggtc accatctact atgggacat gatctccatg tatgtcggcc caaatgcgca 420  
 tctgtccccg gagctcaaca aggtcatttc tgtcttctac actgtgatca cccactact 480  
 g 481

<210> 22  
 <211> 160  
 <212> PRT  
 <213> Rattus sp. J8

<220>  
 <221> UNSURE  
 <222> (90)..(91)  
 <223> x = unknown

<400> 22

Ile	Cys	His	Pro	Leu	His	Tyr	Ser	Leu	Leu	Met	Ser	Pro	Asp	Asn	Cys
1				5					10					15	
Ala	Ala	Leu	Val	Thr	Val	Ser	Trp	Val	Thr	Gly	Val	Gly	Thr	Gly	Phe
			20					25					30		
Leu	Pro	Ser	Leu	Leu	Ile	Ser	Lys	Leu	Asp	Phe	Cys	Gly	Pro	Asn	Arg
		35					40					45			
Ile	Asn	His	Phe	Phe	Cys	Asp	Leu	Pro	Pro	Leu	Ile	Gln	Leu	Ser	Cys
	50					55					60				
Ser	Ser	Val	Phe	Val	Thr	Glu	Met	Ala	Ile	Phe	Val	Leu	Ser	Ile	Ala
	65				70					75					80
Val	Leu	Cys	Ile	Cys	Phe	Leu	Leu	Thr	Xaa	Xaa	Ser	Tyr	Ile	Phe	Ile
			85					90						95	
Val	Ser	Ser	Ile	Leu	Arg	Ile	Pro	Ser	Thr	Thr	Gly	Arg	Met	Lys	Thr
			100					105						110	
Phe	Ser	Thr	Cys	Gly	Ser	His	Leu	Ala	Val	Val	Thr	Ile	Tyr	Tyr	Gly
		115					120					125			
Thr	Met	Ile	Ser	Met	Tyr	Val	Gly	Pro	Asn	Ala	His	Leu	Ser	Pro	Glu
	130					135					140				
Leu	Asn	Lys	Val	Ile	Ser	Val	Phe	Tyr	Thr	Val	Ile	Thr	Pro	Leu	Leu
145					150					155					160

<210> 23  
 <211> 646  
 <212> DNA

<213> Rattus sp. J11

<220>

<221> misc\_feature

<222> ()..()

<223> n = unknown

<400> 23

```
ngtctgcttc tctccacca ctgtcccaa ggtactggct aaccacatac tcagtagtca      60
ggccatttcc ttctctgggt gtctaactca gctgtatttt ctctgtgtgt ctgtgaatat    120
ggacaatttc ctgctggctg tgatggccta tgacagattt gtggccatat gccacccttt    180
gtactacaca acaaagatga cccaccagct ctgtgtcttg ctgggtgtctg gatcannnnn    240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn    300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn    360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nntgtgatca tggtcacccc    420
atttgtctgc atcctcatct cttacatcta catcaccaat gcagtcctca gagtctcatc    480
ctttagggga ggatggaaag cttctccac ctgtggctca cacctggctg tgggtctgcct    540
cttctatggc accatcattg ctgtgtattt caatcctgta tcttcccatt catctgagaa    600
ggacactgca gcaactgtgc tatacacagt ggtgactccc atgttg                      646
```

<210> 24

<211> 215

<212> PRT

<213> Rattus sp. J11

<220>

<221> UNSURE

<222> (79)..(134)

<223> x = unknown

<400> 24

```
Val Cys Phe Ser Ser Thr Thr Val Pro Lys Val Leu Ala Asn His Ile
1          5          10          15
Leu Ser Ser Gln Ala Ile Ser Phe Ser Gly Cys Leu Thr Gln Leu Tyr
20          25          30
Phe Leu Cys Val Ser Val Asn Met Asp Asn Phe Leu Leu Ala Val Met
35          40          45
Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro Leu Tyr Tyr Thr Thr
50          55          60
Lys Met Thr His Gln Leu Cys Val Leu Leu Val Ser Gly Ser Xaa Xaa
65          70          75          80
```



Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
                     85                                    90                                    95  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
                     100                                    105                                    110  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
                     115                                    120                                    125  
 Xaa Xaa Xaa Xaa Xaa Xaa Val Ile Met Val Thr Pro Phe Val Cys Ile  
                     130                                    135                                    140  
 Leu Ile Ser Tyr Ile Tyr Ile Thr Asn Ala Val Leu Arg Val Ser Ser  
                     145                                    150                                    155                                    160  
 Phe Arg Gly Gly Trp Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ala  
                     165                                    170                                    175  
 Val Val Cys Leu Phe Tyr Gly Thr Ile Ile Ala Val Tyr Phe Asn Pro  
                     180                                    185                                    190  
 Val Ser Ser His Ser Ser Glu Lys Asp Thr Ala Ala Thr Val Leu Tyr  
                     195                                    200                                    205  
 Thr Val Val Thr Pro Met Leu  
                     210                                    215

<210> 25  
 <211> 646  
 <212> DNA  
 <213> Rattus sp. J14

<220>  
 <221> misc\_feature  
 <222> ()..()  
 <223> n = unknown

<400> 25  
 tgtctgcttc tcctccacca ctgtcccaa ggtactggct aaccacatac tcagtagtca 60  
 ggccatttcc ttctctgggt gtctaactca gctgtatttt ctctgtgtgt ctgtgaatat 120  
 ggacaatttc ctgctggctg tgatggccta tgacagattt gtggccatat gccacccttt 180  
 gtactacaca acaccgatga cccaccagct ctgtgtcttg ctgggtgtctg gatcannnnn 240  
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300  
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360  
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nntgtgatca tggtcacccc 420  
 atttgtctgc atcctcatct ctacatcta catcaccaat gcagtcctca gagtctcatc 480  
 ctttagggga ggaaggaaag ctttctccac ctgtggctca cacctggctg tgggtctgcct 540  
 cttctatggc accatcattg ctgtgtattt caatcctgta tcttccatt catctgagaa 600

ggacactgca gcaactgtgc tatacacagt ggtgactccc atgttg

646

<210> 26  
 <211> 215  
 <212> PRT  
 <213> Rattus sp. J14

<220>  
 <221> UNSURE  
 <222> (79)..(134)  
 <223> x = unknown

<400> 26

Val	Cys	Phe	Ser	Ser	Thr	Thr	Val	Pro	Lys	Val	Leu	Ala	Asn	His	Ile
1				5					10					15	
Leu	Ser	Ser	Gln	Ala	Ile	Ser	Phe	Ser	Gly	Cys	Leu	Thr	Gln	Leu	Tyr
			20					25					30		
Phe	Leu	Cys	Val	Ser	Val	Asn	Met	Asp	Asn	Phe	Leu	Leu	Ala	Val	Met
		35					40					45			
Ala	Tyr	Asp	Arg	Phe	Val	Ala	Ile	Cys	His	Pro	Leu	Tyr	Tyr	Thr	Thr
	50					55					60				
Pro	Met	Thr	His	Gln	Leu	Cys	Val	Leu	Leu	Val	Ser	Gly	Ser	Xaa	Xaa
65					70					75					80
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
				85					90					95	
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
			100					105					110		
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
			115				120					125			
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Val	Ile	Met	Val	Thr	Pro	Phe	Val	Cys	Ile
			130			135					140				
Leu	Ile	Ser	Tyr	Ile	Tyr	Ile	Thr	Asn	Ala	Val	Leu	Arg	Val	Ser	Ser
145					150					155					160
Phe	Arg	Gly	Gly	Trp	Lys	Ala	Phe	Ser	Thr	Cys	Gly	Ser	His	Leu	Ala
				165					170					175	
Val	Val	Cys	Leu	Phe	Tyr	Gly	Thr	Ile	Ile	Ala	Val	Tyr	Phe	Asn	Pro
			180					185					190		
Val	Ser	Ser	His	Ser	Ser	Glu	Lys	Asp	Thr	Ala	Ala	Thr	Val	Leu	Tyr
			195				200					205			
Thr	Val	Val	Thr	Pro	Met	Leu									
			210			215									

<210> 27  
 <211> 481  
 <212> DNA  
 <213> Rattus sp. J15

<220>  
 <221> misc\_feature  
 <222> ()..()  
 <223> x = unknown

<400> 27  
 tatctgcaac cctctgcgct acccagtgt catgagcggc cgggtgtgcc tgctcatggt 60  
 cgtggcctcc tggttgggag gatccctcaa cgcctccatt cagacttctc tgacccttca 120  
 gttcccctac tgtggatcac ggaagatctc ccacttcttc tgtgaggtgc cctcgctgct 180  
 gannntggcc tgtgcagaca ctgaagccta tgagcaggta ctatttgtga caggcgtggt 240  
 ggtcctcctg gtgccatta cattcattac tgctctttat gccctcatcc tggtgtgtgt 300  
 gctccgaatg cactctgcgg aggggagtc gaaggcccta gccacatgct cctctcacct 360  
 gacagtcgtc aatctcttct atgggccctt tgtctacacc tacatgttac ctgcttccta 420  
 tcactcacca ggccaagacg acatagtatc cgtcttttac accgttctca cacccatgct 480  
 t 481

<210> 28  
 <211> 160  
 <212> PRT  
 <213> Rattus sp. J15

<220>  
 <221> UNSURE  
 <222> (61)..(62)  
 <223> x = unknown

<400> 28  
 Ile Cys Asn Pro Leu Arg Tyr Pro Val Leu Met Ser Gly Arg Val Cys  
 1 5 10 15  
 Leu Leu Met Val Val Ala Ser Trp Leu Gly Gly Ser Leu Asn Ala Ser  
 20 25 30  
 Ile Gln Thr Ser Leu Thr Leu Gln Phe Pro Tyr Cys Gly Ser Arg Lys  
 35 40 45  
 Ile Ser His Phe Phe Cys Glu Val Pro Ser Leu Leu Xaa Xaa Ala Cys  
 50 55 60  
 Ala Asp Thr Glu Ala Tyr Glu Gln Val Leu Phe Val Thr Gly Val Val  
 65 70 75 80

Val Leu Leu Val Pro Ile Thr Phe Ile Thr Ala Ser Tyr Ala Leu Ile  
85 90 95

Leu Ala Ala Val Leu Arg Met His Ser Ala Glu Gly Ser Gln Lys Ala  
100 105 110

Leu Ala Thr Cys Ser Ser His Leu Thr Val Val Asn Leu Phe Tyr Gly  
115 120 125

Pro Leu Val Tyr Thr Tyr Met Leu Pro Ala Ser Tyr His Ser Pro Gly  
130 135 140

Gln Asp Asp Ile Val Ser Val Phe Tyr Thr Val Leu Thr Pro Met Leu  
145 150 155 160

<210> 29  
<211> 481  
<212> DNA  
<213> Rattus sp. J16

<400> 29  
catctgtagg cctcttcact atcctaccct catgaccag acactgtgtg ccaagattgc 60  
cactgggttg tgggtgggag gcttggctgg gccagtggta gaaatttcct tgggtgtctcg 120  
tctccttttt tgtggcccca atcacattca acacatcttt tgtgatttcc cacctgtgct 180  
gagcttggct tgtactgata catcagtga tgtcctggta gattttatta taaacctctg 240  
caagatcctg gccaccttcc tgctgatcct gagctcctac ttgcagataa tccgcacagt 300  
gctcaagatt ccttcagctg caggcaagaa gaaagcattc tcgacttgtg cctcccatct 360  
cactgtgggt ctcattcttct atgggagcat ccttttcatg tatgtgcggc tgaagaagac 420  
ttactccctt gactacgaca gagccttggc agtagtctac tccgtgggta cccctttcct 480  
g 481

<210> 30  
<211> 160  
<212> PRT  
<213> Rattus sp. J16

<400> 30

Ile Cys Arg Pro Leu His Tyr Pro Thr Leu Met Thr Gln Thr Leu Cys  
1 5 10 15

Ala Lys Ile Ala Thr Gly Cys Trp Leu Gly Gly Leu Ala Gly Pro Val  
20 25 30

Val Glu Ile Ser Leu Val Ser Arg Leu Leu Phe Cys Gly Pro Asn His  
35 40 45

Ile Gln His Ile Phe Cys Asp Phe Pro Pro Val Leu Ser Leu Ala Cys  
50 55 60

Thr Asp Thr Ser Val Asn Val Leu Val Asp Phe Ile Ile Asn Leu Cys  
 65 70 75 80  
 Lys Ile Leu Ala Thr Phe Leu Leu Ile Leu Ser Ser Tyr Leu Gln Ile  
 85 90 95  
 Ile Arg Thr Val Leu Lys Ile Pro Ser Ala Ala Gly Lys Lys Lys Ala  
 100 105 110  
 Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Leu Ile Phe Tyr Gly  
 115 120 125  
 Ser Ile Leu Phe Met Tyr Val Arg Leu Lys Lys Thr Tyr Ser Leu Asp  
 130 135 140  
 Tyr Asp Arg Ala Leu Ala Val Val Tyr Ser Val Val Thr Pro Phe Leu  
 145 150 155 160

<210> 31  
 <211> 481  
 <212> DNA  
 <213> Rattus sp. J17

<220>  
 <221> misc\_feature  
 <222> ()..()  
 <223> n = unknown

<400> 31  
 aatctgcaac ccactgcttt attccaccaa aatgtccaca caagtctgta tccagttggt 60  
 tgcaggatct tatatagggg gttttcttaa tacttgccctc atcatgtttt actttttctc 120  
 ttttctcttc tgtgggccaa atatagttga tcattttttc tgtgattttg ctcttttnt 180  
 ggaactttcg tgctctgatg tgagtgtctc tgtagttgtt atgtcatttt ctgctggctc 240  
 agttactatg atcacagtgt ttatcatagc catctcctat tcttacatcc tcatcaccat 300  
 cctgaagatg tcctcaactg agggccgtca caaggctttc tccacatgta cctccacact 360  
 cactgcagtc actctctact atggcaccat taccttcatt tatgtgatgc ccaagtccac 420  
 atactctaca gaccagaaca aggtggtgtc tgtgttttac atggtggtga tcccaatggt 480  
 g 481

<210> 32  
 <211> 160  
 <212> PRT  
 <213> Rattus sp. J17

<220>  
 <221> UNSURE  
 <222> (59)..(60)  
 <223> x = unknown

<400> 32

Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys  
1 5 10 15

Ile Gln Leu Val Ala Gly Ser Tyr Ile Gly Gly Phe Leu Asn Thr Cys  
20 25 30

Leu Ile Met Phe Tyr Phe Phe Ser Phe Leu Phe Cys Gly Pro Asn Ile  
35 40 45

Val Asp His Phe Phe Cys Asp Phe Ala Pro Xaa Xaa Glu Leu Ser Cys  
50 55 60

Ser Asp Val Ser Val Ser Val Val Val Met Ser Phe Ser Ala Gly Ser  
65 70 75 80

Val Thr Met Ile Thr Val Phe Ile Ile Ala Ile Ser Tyr Ser Tyr Ile  
85 90 95

Leu Ile Thr Ile Leu Lys Met Ser Ser Thr Glu Gly Arg His Lys Ala  
100 105 110

Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly  
115 120 125

Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Thr Tyr Ser Thr Asp  
130 135 140

Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu  
145 150 155 160

<210> 33

<211> 479

<212> DNA

<213> Rattus sp. J19

<400> 33

tatctgccac cctctgaagt acacagttat catgaatcac tatttttgtg tgatgctgct	60
gctcttctct gtgttcgtta gcattgcaca tgcgttggtc cacattttta tggtgttgat	120
actgactttc agcacaaaaa ctgaaatccc tcaacttttc tgtgagctgg ctcatatcat	180
caaacttacc tgttccgata attttatcaa ctatctgctg atatacacag agtctgtctt	240
attttttggt gttcatattg tagggatcat tttgtcttat atttacactg tatcctcagt	300
tttaagaatg tcattattgg gaggaatgta taaagccttt tcaacatgtg gatctcattt	360
gtcggttgtc tctgttttat ggcacagggt ttgggggtaca cataagctct ccacttactg	420
actctccaag gaagactgta gtggcttcag tgatgtacac tgtggttact cagatgctg	479

<210> 34

<211> 139

<212> PRT

<213> Rattus sp. J19

<400> 34

Ile Cys His Pro Leu Lys Tyr Thr Val Ile Met Asn His Tyr Phe Cys  
1 5 10 15

Val Met Leu Leu Leu Phe Ser Val Phe Val Ser Ile Ala His Ala Leu  
20 25 30

Phe His Ile Leu Met Val Leu Ile Leu Thr Phe Ser Thr Lys Thr Glu  
35 40 45

Ile Pro His Phe Phe Cys Glu Leu Ala His Ile Ile Lys Leu Thr Cys  
50 55 60

Ser Asp Asn Phe Ile Asn Tyr Leu Leu Ile Tyr Thr Glu Ser Val Leu  
65 70 75 80

Phe Phe Gly Val His Ile Val Gly Ile Ile Leu Ser Tyr Ile Tyr Thr  
85 90 95

Val Ser Ser Val Leu Arg Met Ser Leu Leu Gly Gly Met Tyr Lys Ala  
100 105 110

Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Val Leu Trp His  
115 120 125

Arg Phe Trp Gly Thr His Lys Leu Ser Thr Tyr  
130 135

<210> 35

<211> 480

<212> DNA

<213> Rattus sp. J20

<220>

<221> misc\_feature

<222> ()..()

<223> n = unknown

<400> 35

aatctgctac ccaactgaggt accttctcat catgagctgg gtggtgtgca cagcactgtc 60

cgtggcaatc tgggtcatag gcttttgtgc ctccgttata cctctctgct tcacgaccc 120

cccactctgt ggctccttacg tcgttgatta tcttttctgc gagctgcca tccttctgca 180

cctgttctgc acagatacat ctctgctgga gnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240

nnnnnnnnnn nncccttccct cctgattgtt ctctcctacc ttgcacccct ggtggctgtg 300

ataagaatag actcagctga gggcagaaaa aaggcctttt caacttgtgc ttcacacttg 360

gctgtggtga ccatctacta tggaacaggg ctgatcaggt acttgaggcc caagtcctt 420

tattccgctg agggagacag actgatctct gtgttctatg cagtcattgg ccctgcactg 480

<210> 36  
 <211> 160  
 <212> PRT  
 <213> Rattus sp. J20

<220>  
 <221> UNSURE  
 <222> (71)..(84)  
 <223> x = unknown

<400> 36

Ile	Cys	Tyr	Pro	Leu	Arg	Tyr	Leu	Leu	Ile	Met	Ser	Trp	Val	Val	Cys	
1				5					10						15	
Thr	Ala	Leu	Ser	Val	Ala	Ile	Trp	Val	Ile	Gly	Phe	Cys	Ala	Ser	Val	
			20					25						30		
Ile	Pro	Leu	Cys	Phe	Thr	Ile	Leu	Pro	Leu	Cys	Gly	Pro	Tyr	Val	Val	
		35					40					45				
Asp	Tyr	Leu	Phe	Cys	Glu	Leu	Pro	Ile	Leu	Leu	His	Leu	Phe	Cys	Thr	
	50					55					60					
Asp	Thr	Ser	Leu	Leu	Glu	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	
65					70					75					80	
Xaa	Xaa	Xaa	Xaa	Pro	Phe	Leu	Leu	Ile	Val	Leu	Ser	Tyr	Leu	Arg	Ile	
				85					90					95		
Leu	Val	Ala	Val	Ile	Arg	Ile	Asp	Ser	Ala	Glu	Gly	Arg	Lys	Lys	Ala	
			100					105					110			
Phe	Ser	Thr	Cys	Ala	Ser	His	Leu	Ala	Val	Val	Thr	Ile	Tyr	Tyr	Gly	
		115					120					125				
Thr	Gly	Leu	Ile	Arg	Tyr	Leu	Arg	Pro	Lys	Ser	Leu	Tyr	Ser	Ala	Glu	
	130					135					140					
Gly	Asp	Arg	Leu	Ile	Ser	Val	Phe	Tyr	Ala	Val	Ile	Gly	Pro	Ala	Leu	
145					150					155					160	

<210> 37  
 <211> 35  
 <212> DNA  
 <213> artificial - primer A1

<220>  
 <221> modified\_base  
 <222> (9)..(9)  
 <223> i

<220>  
 <221> misc\_feature  
 <222> (3)..(3)  
 <223> t or c



<220>  
<221> modified\_base  
<222> (12)..(12)  
<223> i

<220>  
<221> misc\_feature  
<222> (5)..(5)  
<223> g or a

<220>  
<221> misc\_feature  
<222> (6)..(6)  
<223> g or c

<220>  
<221> misc\_feature  
<222> (10)..(10)  
<223> a or c

<220>  
<221> misc\_feature  
<222> (13)..(13)  
<223> g or c

<220>  
<221> modified\_base  
<222> (15)..(15)  
<223> i

<220>  
<221> modified\_base  
<222> (21)..(21)  
<223> i

<220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> t or c

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> c or t

<220>  
<221> modified\_base  
<222> (24)..(24)

<223> i

<220>

<221> modified\_base

<222> (27)..(27)

<223> i

<220>

<221> modified\_base

<222> (30)..(30)

<223> i

<220>

<221> modified\_base

<222> (33)..(33)

<223> i

<400> 37

aantnnaatnn tntntnaannt ngcngtngcn gcnga

35

<210> 38

<211> 32

<212> DNA

<213> artificial - primer A2

<220>

<221> misc\_feature

<222> (3)..(3)

<223> n = c or t

<220>

<221> misc\_feature

<222> (6)..(6)

<223> n = c or t

<220>

<221> misc\_feature

<222> (9)..(9)

<223> n = c or t

<220>

<221> misc\_feature

<222> (10)..(10)

<223> n = c or a

<220>

<221> modified\_base

<222> (12)..(12)

<223> i

<220>  
 <221> misc\_feature  
 <222> (13)..(13)  
 <223> n = g or a

<220>  
 <221> modified\_base  
 <222> (15)..(15)  
 <223> i

<220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> n = t or c

<220>  
 <221> modified\_base  
 <222> (21)..(21)  
 <223> i

<220>  
 <221> modified\_base  
 <222> (24)..(24)  
 <223> i

<220>  
 <221> misc\_feature  
 <222> (25)..(25)  
 <223> n = c or t

<220>  
 <221> modified\_base  
 <222> (27)..(27)  
 <223> i

<220>  
 <221> modified\_base  
 <222> (30)..(30)  
 <223> i

<400> 38  
 aantantnn tnntnaanct ngcnntngcn ga

32

<210> 39  
 <211> 32  
 <212> DNA  
 <213> artificial - primer A3  
 <220>

<221> misc\_feature  
<222> (3)..(4)  
<223> n = c or t

<220>  
<221> misc\_feature  
<222> (5)..(5)  
<223> n = a or t

<220>  
<221> modified\_base  
<222> (6)..(6)  
<223> i

<220>  
<221> misc\_feature  
<222> (9)..(9)  
<223> n = c or t

<220>  
<221> misc\_feature  
<222> (10)..(10)  
<223> n = c or a

<220>  
<221> modified\_base  
<222> (12)..(12)  
<223> i

<220>  
<221> modified\_base  
<222> (15)..(15)  
<223> i

<220>  
<221> misc\_feature  
<222> (16)..(16)  
<223> n = a or t

<220>  
<221> modified\_base  
<222> (18)..(18)  
<223> i

<220>  
<221> modified\_base  
<222> (21)..(21)  
<223> i

<220>  
<221> modified\_base  
<222> (24)..(24)  
<223> i

<220>  
<221> misc\_feature  
<222> (26)..(26)  
<223> n = c or g

<220>  
<221> modified\_base  
<222> (27)..(27)  
<223> i

<220>  
<221> modified\_base  
<222> (30)..(30)  
<223> i

<400> 39  
aannntttnn tnatnnncnt ngcntnnngcn ga

32

<210> 40  
<211> 32  
<212> DNA  
<213> artificial - primer A4

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> n = c or a

<220>  
<221> modified\_base  
<222> (3)..(3)  
<223> i

<220>  
<221> modified\_base  
<222> (6)..(6)  
<223> i

<220>  
<221> misc\_feature  
<222> (7)..(7)  
<223> n = t or c

<220>  
<221> modified\_base

<222> (9)..(9)  
<223> i

<220>  
<221> misc\_feature  
<222> (15)..(15)  
<223> n = c or t

<220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> n = c or t

<220>  
<221> modified\_base  
<222> (21)..(21)  
<223> i

<220>  
<221> misc\_feature  
<222> (22)..(22)  
<223> n = a or t

<220>  
<221> misc\_feature  
<222> (23)..(23)  
<223> n = c or g

<220>  
<221> misc\_feature  
<222> (24)..(24)  
<223> n = c or t

<220>  
<221> misc\_feature  
<222> (27)..(27)  
<223> n = c or t

<220>  
<221> modified\_base  
<222> (30)..(30)  
<223> i

<400> 40  
ngnttnntna tgtgnaanct nnnnttngcn ga

32

<210> 41  
<211> 32  
<212> DNA

<213> artificial - primer A5

<220>

<221> modified\_base

<222> (3)..(3)

<223> i

<220>

<221> modified\_base

<222> (6)..(6)

<223> i

<220>

<221> misc\_feature

<222> (9)..(9)

<223> n = t or c

<220>

<221> modified\_base

<222> (12)..(12)

<223> i

<220>

<221> modified\_base

<222> (15)..(15)

<223> i

<220>

<221> misc\_feature

<222> (18)..(19)

<223> n = t or c

<220>

<221> modified\_base

<222> (21)..(21)

<223> i

<220>

<221> misc\_feature

<222> (22)..(22)

<223> n = a or t

<220>

<221> misc\_feature

<222> (23)..(23)

<223> n = c or g

<220>

<221> modified\_base

<222> (24)..(24)

<223> i

<220>

<221> modified\_base

<222> (27)..(27)

<223> i

<220>

<221> modified\_base

<222> (30)..(30)

<223> i

<400> 41

acngtntana tnacncannt nnnnatngcn ga

32

<210> 42

<211> 33

<212> DNA

<213> artificial - primer B1

<220>

<221> modified\_base

<222> (4)..(4)

<223> i

<220>

<221> misc\_feature

<222> (5)..(5)

<223> n = c or t

<220>

<221> misc\_feature

<222> (6)..(6)

<223> n = g or t

<220>

<221> misc\_feature

<222> (7)..(7)

<223> n = g or a

<220>

<221> modified\_base

<222> (13)..(13)

<223> i

<220>

<221> misc\_feature

<222> (15)..(15)

<223> n = a or t



<220>  
<221> modified\_base  
<222> (16)..(16)  
<223> i

<220>  
<221> misc\_feature  
<222> (17)..(18)  
<223> n = a or c

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> n = a or g

<220>  
<221> modified\_base  
<222> (22)..(22)  
<223> i

<220>  
<221> misc\_feature  
<222> (24)..(24)  
<223> n = t or c

<220>  
<221> modified\_base  
<222> (25)..(25)  
<223> i

<220>  
<221> misc\_feature  
<222> (27)..(27)  
<223> n = t or c

<220>  
<221> modified\_base  
<222> (28)..(28)  
<223> i

<220>  
<221> misc\_feature  
<222> (31)..(31)  
<223> n = g or a

<400> 42  
ctgnnnnttc atnannnnnt anannanngg ntt

33

<210> 43  
<211> 31  
<212> DNA  
<213> artificial - primer B2

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> n = g or t

<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> n = g or a

<220>  
<221> misc\_feature  
<222> (4)..(4)  
<223> n = g or c

<220>  
<221> misc\_feature  
<222> (5)..(5)  
<223> n = g or a

<220>  
<221> modified\_base  
<222> (8)..(8)  
<223> i

<220>  
<221> misc\_feature  
<222> (11)..(11)  
<223> n = g or a

<220>  
<221> misc\_feature  
<222> (14)..(14)  
<223> n = g or a

<220>  
<221> misc\_feature  
<222> (17)..(17)  
<223> n = g or a

<220>  
<221> modified\_base  
<222> (20)..(20)  
<223> i

<220>  
<221> modified\_base  
<222> (23)..(23)  
<223> i

<220>  
<221> modified\_base  
<222> (26)..(26)  
<223> i

<220>  
<221> misc\_feature  
<222> (29)..(29)  
<223> n = g or a

<400> 43  
nntnnttnag ncancantan atnatnggnt t

31

<210> 44  
<211> 32  
<212> DNA  
<213> artificial - primer B3

<220>  
<221> modified\_base  
<222> (3)..(3)  
<223> i

<220>  
<221> misc\_feature  
<222> (6)..(6)  
<223> n = g or a

<220>  
<221> misc\_feature  
<222> (9)..(9)  
<223> n = g or a

<220>  
<221> modified\_base  
<222> (12)..(12)  
<223> i

<220>  
<221> modified\_base  
<222> (15)..(15)  
<223> i

<220>  
<221> misc\_feature

<222> (18)..(18)  
<223> n = g or a

<220>  
<221> modified\_base  
<222> (21)..(21)  
<223> i

<220>  
<221> modified\_base  
<222> (24)..(24)  
<223> i

<220>  
<221> modified\_base  
<222> (27)..(27)  
<223> i

<220>  
<221> misc\_feature  
<222> (30)..(30)  
<223> n = g or a

<400> 44  
tcnatntttna angtngtnta natnatnggn tt

32

<210> 45  
<211> 32  
<212> DNA  
<213> artificial - primer B4

<220>  
<221> misc\_feature  
<222> (3)..(3)  
<223> n = c or t

<220>  
<221> modified\_base  
<222> (6)..(6)  
<223> i

<220>  
<221> misc\_feature  
<222> (9)..(9)  
<223> n = g or a

<220>  
<221> modified\_base  
<222> (12)..(12)  
<223> i

<220>  
<221> modified\_base  
<222> (15)..(15)  
<223> i

<220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> n = g or a

<220>  
<221> modified\_base  
<222> (21)..(21)  
<223> i

<220>  
<221> misc\_feature  
<222> (24)..(24)  
<223> n = g or a

<220>  
<221> modified\_base  
<222> (27)..(27)  
<223> i

<220>  
<221> misc\_feature  
<222> (30)..(30)  
<223> n = g or a

<400> 45  
gcnttngtna anatngcnta nagnaanggn tt

32

<210> 46  
<211> 32  
<212> DNA  
<213> artificial - primer B5

<220>  
<221> misc\_feature  
<222> (3)..(3)  
<223> n = a or g

<220>  
<221> modified\_base  
<222> (6)..(6)  
<223> i

<220>  
<221> misc\_feature  
<222> (9)..(9)  
<223> n = a or g

<220>  
<221> misc\_feature  
<222> (10)..(10)  
<223> n = c or g

<220>  
<221> misc\_feature  
<222> (11)..(11)  
<223> n = a or t

<220>  
<221> modified\_base  
<222> (12)..(12)  
<223> i

<220>  
<221> modified\_base  
<222> (15)..(15)  
<223> i

<220>  
<221> misc\_feature  
<222> (16)..(16)  
<223> n = g or c

<220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> n = g or a

<220>  
<221> modified\_base  
<222> (21)..(21)  
<223> i

<220>  
<221> misc\_feature  
<222> (24)..(24)  
<223> n = g or c

<220>  
<221> modified\_base  
<222> (26)..(27)  
<223> i

<220>  
 <221> misc\_feature  
 <222> (30)..(30)  
 <223> n = a or g  
  
 <400> 46  
 aantcngggn nncggnanta natnannggn tt

32

<210> 47  
 <211> 32  
 <212> DNA  
 <213> artificial - primer B6

<220>  
 <221> misc\_feature  
 <222> (1)..(1)  
 <223> n = g or c

<220>  
 <221> misc\_feature  
 <222> (2)..(2)  
 <223> n = a or t

<220>  
 <221> modified\_base  
 <222> (3)..(3)  
 <223> i

<220>  
 <221> misc\_feature  
 <222> (4)..(4)  
 <223> n = g or c

<220>  
 <221> misc\_feature  
 <222> (5)..(5)  
 <223> n = a or t

<220>  
 <221> modified\_base  
 <222> (6)..(6)  
 <223> i

<220>  
 <221> modified\_base  
 <222> (9)..(9)  
 <223> i

<220>

<221> misc\_feature  
<222> (12)..(12)  
<223> n = a or g

<220>  
<221> misc\_feature  
<222> (15)..(15)  
<223> n = a or g

<220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> n = a or g

<220>  
<221> modified\_base  
<222> (21)..(21)  
<223> i

<220>  
<221> misc\_feature  
<222> (24)..(24)  
<223> n = a or g

<220>  
<221> modified\_base  
<222> (27)..(27)  
<223> i

<220>  
<221> misc\_feature  
<222> (30)..(30)  
<223> n = g or a

<400> 47  
nnnnnnccna cnaanaanta natnaangggn tt

32

<210> 48  
<211> 23  
<212> DNA  
<213> artificial - primer P1

<220>  
<221> modified\_base  
<222> (6)..(6)  
<223> i

<220>  
<221> misc\_feature  
<222> (9)..(9)



<223> n = t or c

<220>

<221> misc\_feature

<222> (12)..(12)

<223> n = t or c

<220>

<221> misc\_feature

<222> (13)..(13)

<223> n = a or c

<220>

<221> modified\_base

<222> (15)..(15)

<223> i

<220>

<221> misc\_feature

<222> (18)..(18)

<223> n = t or c

<220>

<221> modified\_base

<222> (21)..(21)

<223> i

<400> 48

atggcntang annngntangt ngc

23

<210> 49

<211> 29

<212> DNA

<213> artificial - primer P4

<220>

<221> modified\_base

<222> (3)..(3)

<223> i

<220>

<221> misc\_feature

<222> (5)..(5)

<223> n = g or a

<220>

<221> modified\_base

<222> (6)..(6)

<223> i

<220>  
<221> misc\_feature  
<222> (7)..(7)  
<223> n = g or c

<220>  
<221> misc\_feature  
<222> (8)..(8)  
<223> n = a or t

<220>  
<221> modified\_base  
<222> (9)..(9)  
<223> i

<220>  
<221> modified\_base  
<222> (12)..(12)  
<223> i

<220>  
<221> misc\_feature  
<222> (14)..(14)  
<223> n = t or c

<220>  
<221> modified\_base  
<222> (15)..(15)  
<223> i

<220>  
<221> misc\_feature  
<222> (16)..(16)  
<223> n = g or c

<220>  
<221> misc\_feature  
<222> (17)..(17)  
<223> n = a or t

<220>  
<221> modified\_base  
<222> (18)..(18)  
<223> i

<220>  
<221> misc\_feature  
<222> (20)..(20)  
<223> n = g or a

<220>  
 <221> misc\_feature  
 <222> (21)..(21)  
 <223> n = g or a

<220>  
 <221> modified\_base  
 <222> (24)..(24)  
 <223> i

<220>  
 <221> misc\_feature  
 <222> (25)..(25)  
 <223> n = g or c

<220>  
 <221> misc\_feature  
 <222> (26)..(26)  
 <223> n = a or t

<220>  
 <221> modified\_base  
 <222> (27)..(27)  
 <223> i

<220>  
 <221> misc\_feature  
 <222> (28)..(28)  
 <223> n = g or c

<400> 49  
 aanannnnna cnannnnnan ntgnnnnnc

29

<210> 50  
 <211> 6  
 <212> PRT  
 <213> artificial - motif

<400> 50

Lys Ile Val Ser Ser Ile  
 1 5

<210> 51  
 <211> 6  
 <212> PRT  
 <213> artificial - motif

<400> 51

Arg Ile Val Ser Ser Ile  
1 5

<210> 52  
<211> 6  
<212> PRT  
<213> artificial - motif

<400> 52

His Ile Thr Cys Ala Val  
1 5

<210> 53  
<211> 6  
<212> PRT  
<213> artificial - motif

<400> 53

His Ile Thr Trp Ala Val  
1 5

<210> 54  
<211> 19  
<212> PRT  
<213> Rattus sp.

<400> 54

Leu Ser Lys Glu Asp Cys Ser Gly Phe Ser Asp Val His Cys Gly Tyr  
1 5 10 15

Ser Asp Ala

<210> 55  
<211> 9  
<212> PRT  
<213> Artificial - motif

<220>  
<221> UNSURE  
<222> (2)..(7)  
<223> x = unknown

<400> 55

Leu Xaa Xaa Pro Met Tyr Xaa Phe Leu  
1 5

<210> 56  
<211> 9  
<212> PRT  
<213> Artificial - motif

<220>  
<221> VARIANT

<222> (2)..(2)  
<223> X = H or Q

<220>  
<221> VARIANT  
<222> (3)..(3)  
<223> X = K or M or T

<220>  
<221> VARIANT  
<222> (7)..(7)  
<223> X = F or L

<400> 56

Leu Xaa Xaa Pro Met Tyr Xaa Phe Leu  
1 5

<210> 57  
<211> 10  
<212> PRT  
<213> Artificial - motif

<220>  
<221> UNSURE  
<222> (2)..(7)  
<223> X = UNKNOWN

<400> 57

Met Xaa Tyr Asp Arg Xaa Xaa Ala Ile Cys  
1 5 10

<210> 58  
<211> 10  
<212> PRT  
<213> Artificial - motif

<220>  
<221> VARIANT  
<222> (2)..(2)  
<223> X = A OR S

<220>  
<221> VARIANT  
<222> (6)..(6)  
<223> X = F OR Y

<220>  
<221> VARIANT  
<222> (7)..(7)  
<223> X = L or V

<400> 58

Met Xaa Tyr Asp Arg Xaa Xaa Ala Ile Cys  
1 5 10

<210> 59

<211> 7

<212> PRT

<213> Artificial - motif

<220>

<221> UNSURE

<222> (3)..(4)

<223> X = Unknown

<400> 59

Asp Arg Xaa Xaa Ala Ile Cys  
1 5

<210> 60

<211> 7

<212> PRT

<213> Artificial - motif

<220>

<221> VARIANT

<222> (3)..(3)

<223> X = F or Y

<220>

<221> VARIANT

<222> (4)..(4)

<223> X = L or V

<400> 60

Asp Arg Xaa Xaa Ala Ile Cys  
1 5

<210> 61

<211> 9

<212> PRT

<213> Artificial - motif

<220>

<221> UNSURE

<222> (2)..(7)

<223> X = Unknown

<220>

<221> VARIANT

<222> (1)..(1)

<223> X = K or R

<400> 61

Xaa Xaa Phe Ser Thr Cys Xaa Ser His  
1 5

<210> 62

<211> 9

<212> PRT

<213> Artificial - motif

<220>

<221> VARIANT

<222> (1)..(1)

<223> X = K or R

<220>

<221> VARIANT

<222> (2)..(2)

<223> X = A or I or S or V

<220>

<221> VARIANT

<222> (7)..(7)

<223> X = A or G or S

<400> 62

Xaa Xaa Phe Ser Thr Cys Xaa Ser His  
1 5

<210> 63

<211> 7

<212> PRT

<213> Artificial - motif

<220>

<221> UNSURE

<222> (5)..(5)

<223> X = Unknown

<400> 63

Phe Ser Thr Cys Xaa Ser His  
1 5

<210> 64

<211> 7

<212> PRT

<213> Artificial - motif

<220>

<221> VARIANT

<222> (5)..(5)

<223> X = A or G or S

<400> 64

Phe Ser Thr Cys Xaa Ser His  
1 5

<210> 65

<211> 12

<212> PRT

<213> Artificial - motif

<220>

<221> UNSURE

<222> (2)..(9)

<223> X = Unknown

<400> 65

Pro Xaa Xaa Asn Pro Xaa Ile Tyr Xaa Leu Arg Asn  
1 5 10

<210> 66

<211> 12

<212> PRT

<213> Artificial - motif

<220>

<221> VARIANT

<222> (2)..(2)

<223> X = M or L or V

<220>

<221> VARIANT

<222> (3)..(3)

<223> X = F or L or V

<220>

<221> VARIANT

<222> (6)..(6)

<223> X = F or I

<220>

<221> VARIANT

<222> (9)..(9)

<223> X = C or S or T

<400> 66

Pro Xaa Xaa Asn Pro Xaa Ile Tyr Xaa Leu Arg Asn  
1 5 10

<210> 67



<211> 8  
<212> PRT  
<213> Artificial - motif

<220>  
<221> UNSURE  
<222> (2)..(6)  
<223> X = Unknown

<400> 67

Pro Xaa Xaa Asn Pro Xaa Ile Tyr  
1 5

<210> 68  
<211> 8  
<212> PRT  
<213> Artificial - motif

<220>  
<221> VARIANT  
<222> (2)..(2)  
<223> X = M or L or V

<220>  
<221> VARIANT  
<222> (3)..(3)  
<223> X = F or L or V

<220>  
<221> VARIANT  
<222> (6)..(6)  
<223> X = F or I

<400> 68

Pro Xaa Xaa Asn Pro Xaa Ile Tyr  
1 5

<210> 69  
<211> 9  
<212> PRT  
<213> Artificial - motif

<220>  
<221> UNSURE  
<222> (3)..(6)  
<223> X = Unknown

<400> 69

Asn Pro Xaa Ile Tyr Xaa Leu Arg Asn  
1 5

<210> 70  
 <211> 9  
 <212> PRT  
 <213> Artificial - motif

<220>  
 <221> VARIANT  
 <222> (3)..(3)  
 <223> X = F or I

<220>  
 <221> VARIANT  
 <222> (6)..(6)  
 <223> X = C or S or T

<400> 70

Asn Pro Xaa Ile Tyr Xaa Leu Arg Asn  
 1 5

<210> 71  
 <211> 333  
 <212> PRT  
 <213> Rattus sp. F3

<400> 71

Met	Asp	Ser	Ser	Asn	Arg	Thr	Arg	Val	Ser	Glu	Phe	Leu	Leu	Leu	Gly
1				5					10					15	
Phe	Val	Glu	Asn	Lys	Asp	Leu	Gln	Pro	Leu	Ile	Tyr	Gly	Leu	Phe	Leu
			20					25					30		
Ser	Met	Tyr	Leu	Val	Thr	Val	Ile	Gly	Asn	Ile	Ser	Ile	Ile	Val	Ala
		35					40					45			
Ile	Ile	Ser	Asp	Pro	Cys	Leu	His	Thr	Pro	Met	Tyr	Phe	Phe	Leu	Ser
		50				55					60				
Asn	Leu	Ser	Phe	Val	Asp	Ile	Cys	Phe	Ile	Ser	Thr	Thr	Val	Pro	Lys
65				70						75				80	
Met	Leu	Val	Asn	Ile	Gln	Thr	Gln	Asn	Asn	Val	Ile	Thr	Tyr	Ala	Gly
			85						90					95	
Cys	Ile	Thr	Gln	Ile	Tyr	Phe	Phe	Leu	Leu	Phe	Val	Glu	Leu	Asp	Asn
			100					105					110		
Phe	Leu	Leu	Thr	Ile	Met	Ala	Tyr	Asp	Arg	Tyr	Val	Ala	Ile	Cys	His
			115				120					125			
Pro	Met	His	Tyr	Thr	Val	Ile	Met	Asn	Tyr	Lys	Leu	Cys	Gly	Phe	Leu
			130			135					140				
Val	Leu	Val	Ser	Trp	Ile	Val	Ser	Val	Leu	His	Ala	Leu	Phe	Gln	Ser
145					150					155					160

Leu Met Met Leu Ala Leu Pro Phe Cys Thr His Leu Glu Ile Pro His  
 165 170 175  
 Tyr Phe Cys Glu Pro Asn Gln Val Ile Gln Leu Thr Cys Ser Asp Ala  
 180 185 190  
 Phe Leu Asn Asp Leu Val Ile Tyr Phe Thr Leu Val Leu Leu Ala Thr  
 195 200 205  
 Val Pro Leu Ala Gly Ile Phe Tyr Ser Tyr Phe Lys Ile Val Ser Ser  
 210 215 220  
 Ile Cys Ala Ile Ser Ser Val His Gly Lys Tyr Lys Ala Phe Ser Thr  
 225 230 235 240  
 Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr Cys Thr Gly Leu  
 245 250 255  
 Gly Val Tyr Leu Ser Ser Ala Ala Asn Asn Ser Ser Gln Ala Ser Ala  
 260 265 270  
 Thr Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Val Asn Pro Phe  
 275 280 285  
 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Val Leu Lys Lys Thr  
 290 295 300  
 Leu Cys Glu Glu Val Ile Arg Ser Pro Pro Ser Leu Leu His Phe Phe  
 305 310 315 320  
 Leu Val Leu Cys His Leu Pro Cys Phe Ile Phe Cys Tyr  
 325 330

<210> 72  
 <211> 313  
 <212> PRT  
 <213> Rattus sp. F5

<400> 72

Met Ser Ser Thr Asn Gln Ser Ser Val Thr Glu Phe Leu Leu Leu Gly  
 1 5 10 15  
 Leu Ser Arg Gln Pro Gln Gln Gln Gln Leu Leu Phe Leu Leu Phe Leu  
 20 25 30  
 Ile Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala  
 35 40 45  
 Ile Gly Thr Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser  
 50 55 60  
 Asn Leu Ser Phe Val Asp Val Cys Phe Ser Ser Thr Thr Val Pro Lys  
 65 70 75 80  
 Val Leu Ala Asn His Ile Leu Gly Ser Gln Ala Ile Ser Phe Ser Gly  
 85 90 95  
 Cys Leu Thr Gln Leu Tyr Phe Leu Ala Val Phe Gly Asn Met Asp Asn

Phe Leu Leu Ala Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His  
115 120 125

Pro Leu His Tyr Thr Thr Lys Met Thr Arg Gln Leu Cys Val Leu Leu  
130 135 140

Val Val Gly Ser Trp Val Val Ala Asn Met Asn Cys Leu Leu His Ile  
145 150 155 160

Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro His  
165 170 175

Phe Phe Cys Asp Gly Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr  
180 185 190

His Leu Asn Glu Leu Met Ile Leu Thr Glu Gly Ala Val Val Met Val  
195 200 205

Thr Pro Phe Val Cys Ile Leu Ile Ser Tyr Ile His Ile Thr Cys Ala  
210 215 220

Val Leu Arg Val Ser Ser Pro Arg Gly Gly Trp Lys Ser Phe Ser Thr  
225 230 235 240

Cys Gly Ser His Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Val Ile  
245 250 255

Ala Val Tyr Phe Asn Pro Ser Ser Ser His Leu Ala Gly Arg Asp Met  
260 265 270

Ala Ala Ala Val Met Tyr Ala Val Val Thr Pro Met Leu Asn Pro Phe  
275 280 285

Ile Tyr Ser Leu Arg Asn Ser Asp Met Lys Ala Ala Leu Arg Lys Val  
290 295 300

Leu Ala Met Arg Phe Pro Ser Lys Gln  
305 310

<210> 73  
<211> 311  
<212> PRT  
<213> Rattus sp. F6  
  
<400> 73

Met Ala Trp Ser Thr Gly Gln Asn Leu Ser Thr Pro Gly Pro Phe Ile  
1 5 10 15

Leu Leu Gly Phe Pro Gly Pro Arg Ser Met Arg Ile Gly Leu Phe Leu  
20 25 30

Leu Phe Leu Val Met Tyr Leu Leu Thr Val Val Gly Asn Leu Ala Ile  
35 40 45

Ile Ser Leu Val Gly Ala His Arg Cys Leu Gln Thr Pro Met Tyr Phe  
50 55 60

Phe	Leu	Cys	Asn	Leu	Ser	Phe	Leu	Glu	Ile	Trp	Phe	Thr	Thr	Ala	Cys	
65					70					75					80	
Val	Pro	Lys	Thr	Leu	Ala	Thr	Phe	Ala	Pro	Arg	Gly	Gly	Val	Ile	Ser	
				85					90					95		
Leu	Ala	Gly	Cys	Ala	Thr	Gln	Met	Tyr	Phe	Val	Phe	Ser	Leu	Gly	Cys	
			100					105					110			
Thr	Glu	Tyr	Phe	Leu	Leu	Ala	Val	Met	Ala	Tyr	Asp	Arg	Tyr	Leu	Ala	
		115					120					125				
Ile	Cys	Leu	Pro	Leu	Arg	Tyr	Gly	Gly	Ile	Met	Thr	Pro	Gly	Leu	Ala	
	130					135					140					
Met	Arg	Leu	Ala	Leu	Gly	Ser	Trp	Leu	Cys	Gly	Phe	Ser	Ala	Ile	Thr	
145					150					155					160	
Val	Pro	Ala	Thr	Leu	Ile	Ala	Arg	Leu	Ser	Phe	Cys	Gly	Ser	Arg	Val	
				165					170					175		
Ile	Asn	His	Phe	Phe	Cys	Asp	Ile	Ser	Pro	Trp	Ile	Val	Leu	Ser	Cys	
			180					185					190			
Thr	Asp	Thr	Gln	Val	Val	Glu	Leu	Val	Ser	Phe	Gly	Ile	Ala	Phe	Cys	
		195					200					205				
Val	Ile	Leu	Gly	Ser	Cys	Gly	Ile	Thr	Leu	Val	Ser	Tyr	Ala	Tyr	Ile	
	210					215					220					
Ile	Thr	Thr	Ile	Ile	Lys	Ile	Pro	Ser	Ala	Arg	Gly	Arg	His	Arg	Ala	
225					230					235					240	
Phe	Ser	Thr	Cys	Ser	Ser	His	Leu	Thr	Val	Val	Leu	Ile	Trp	Tyr	Gly	
			245						250					255		
Ser	Thr	Ile	Phe	Leu	His	Val	Arg	Thr	Ser	Val	Glu	Ser	Ser	Leu	Asp	
			260					265					270			
Leu	Thr	Lys	Ala	Ile	Thr	Val	Leu	Asn	Thr	Ile	Val	Thr	Pro	Val	Leu	
		275					280					285				
Asn	Pro	Phe	Ile	Tyr	Thr	Leu	Arg	Asn	Lys	Asp	Val	Lys	Glu	Ala	Leu	
	290					295					300					
Arg	Arg	Thr	Val	Lys	Gly	Lys										
305					310											

<210> 74  
 <211> 317  
 <212> PRT  
 <213> Rattus sp. F12

<400> 74

Met	Glu	Ser	Gly	Asn	Ser	Thr	Arg	Arg	Phe	Ser	Ser	Phe	Phe	Leu	Leu	
1				5					10					15		

Gly	Phe	Thr	Glu	Asn	Pro	Gln	Leu	His	Phe	Leu	Ile	Phe	Ala	Leu	Phe			
			20					25					30					
Leu	Ser	Met	Tyr	Leu	Val	Thr	Val	Leu	Gly	Asn	Leu	Leu	Ile	Ile	Met			
		35					40					45						
Ala	Ile	Ile	Thr	Gln	Ser	His	Leu	His	Thr	Pro	Met	Tyr	Phe	Phe	Leu			
	50					55					60							
Ala	Asn	Leu	Ser	Phe	Val	Asp	Ile	Cys	Phe	Thr	Ser	Thr	Thr	Ile	Pro			
65					70					75					80			
Lys	Met	Leu	Val	Asn	Ile	Tyr	Thr	Gln	Ser	Lys	Ser	Ile	Thr	Tyr	Glu			
				85					90					95				
Asp	Cys	Ile	Ser	Gln	Met	Cys	Val	Phe	Leu	Val	Phe	Ala	Glu	Leu	Gly			
			100					105					110					
Asn	Phe	Leu	Leu	Ala	Val	Met	Ala	Tyr	Asp	Arg	Tyr	Val	Ala	Asn	Cys			
		115					120					125						
His	Pro	Leu	Cys	Tyr	Thr	Val	Ile	Val	Asn	His	Arg	Leu	Cys	Ile	Leu			
	130					135					140							
Leu	Leu	Leu	Leu	Ser	Trp	Val	Ile	Ser	Ile	Phe	His	Ala	Phe	Ile	Gln			
145					150					155					160			
Ser	Leu	Ile	Val	Leu	Gln	Leu	Thr	Phe	Cys	Gly	Asp	Val	Lys	Ile	Pro			
				165					170					175				
His	Phe	Phe	Cys	Glu	Leu	Asn	Gln	Leu	Ser	Gln	Leu	Thr	Cys	Ser	Asp			
			180				185						190					
Asn	Phe	Pro	Ser	His	Leu	Ile	Met	Asn	Leu	Val	Pro	Val	Met	Leu	Ala			
		195					200					205						
Ala	Ile	Ser	Phe	Ser	Gly	Ile	Leu	Tyr	Ser	Tyr	Phe	Lys	Ile	Val	Ser			
	210					215					220							
Ser	Ile	His	Ser	Ile	Ser	Thr	Val	Gln	Gly	Lys	Tyr	Lys	Ala	Phe	Ser			
225					230					235					240			
Thr	Cys	Ala	Ser	His	Leu	Ser	Ile	Val	Ser	Leu	Phe	Tyr	Ser	Thr	Gly			
				245					250					255				
Leu	Gly	Val	Tyr	Val	Ser	Ser	Ala	Val	Val	Gln	Ser	Ser	His	Ser	Ala			
		260						265					270					
Ala	Ser	Ala	Ser	Val	Met	Tyr	Thr	Val	Val	Thr	Pro	Met	Leu	Asn	Pro			
		275					280					285						
Phe	Ile	Tyr	Ser	Leu	Arg	Asn	Lys	Asp	Val	Lys	Arg	Ala	Leu	Glu	Arg			
	290					295					300							
Leu	Leu	Glu	Gly	Asn	Cys	Lys	Val	His	His	Trp	Thr	Gly						
305					310					315								

<210> 75  
 <211> 310

<212> PRT  
 <213> Rattus sp. I3

<400> 75

Met	Asn	Asn	Gln	Thr	Phe	Ile	Thr	Gln	Phe	Leu	Leu	Leu	Gly	Leu	Pro	1	5	10	15
Ile	Pro	Glu	Glu	His	Gln	His	Leu	Phe	Tyr	Ala	Leu	Phe	Leu	Val	Met	20	25	30	
Tyr	Leu	Thr	Thr	Ile	Leu	Gly	Asn	Leu	Leu	Ile	Ile	Val	Leu	Val	Gln	35	40	45	
Leu	Asp	Ser	Gln	Leu	His	Thr	Pro	Met	Tyr	Leu	Phe	Leu	Ser	Asn	Leu	50	55	60	
Ser	Phe	Ser	Asp	Leu	Cys	Phe	Ser	Ser	Val	Thr	Met	Pro	Lys	Leu	Leu	65	70	75	80
Gln	Asn	Met	Arg	Ser	Gln	Asp	Thr	Ser	Ile	Pro	Tyr	Gly	Gly	Cys	Leu	85	90	95	
Ala	Gln	Thr	Tyr	Phe	Phe	Met	Val	Phe	Gly	Asp	Met	Glu	Ser	Phe	Leu	100	105	110	
Leu	Val	Ala	Met	Ala	Tyr	Asp	Arg	Tyr	Val	Ala	Ile	Cys	Phe	Pro	Leu	115	120	125	
His	Tyr	Thr	Ser	Ile	Met	Ser	Pro	Lys	Leu	Cys	Thr	Cys	Leu	Val	Leu	130	135	140	
Leu	Leu	Trp	Met	Leu	Thr	Thr	Ser	His	Ala	Met	Met	His	Thr	Leu	Leu	145	150	155	160
Ala	Ala	Arg	Leu	Ser	Phe	Cys	Glu	Asn	Asn	Val	Val	Leu	Asn	Phe	Phe	165	170	175	
Cys	Asp	Leu	Phe	Val	Leu	Leu	Lys	Leu	Ala	Cys	Ser	Asp	Thr	Tyr	Ile	180	185	190	
Asn	Glu	Leu	Met	Ile	Phe	Ile	Met	Ser	Thr	Leu	Leu	Ile	Ile	Ile	Pro	195	200	205	
Phe	Phe	Leu	Ile	Val	Met	Ser	Tyr	Ala	Arg	Ile	Ile	Ser	Ser	Ile	Leu	210	215	220	
Lys	Val	Pro	Ser	Thr	Gln	Gly	Ile	Cys	Lys	Val	Phe	Ser	Thr	Cys	Gly	225	230	235	240
Ser	His	Leu	Ser	Val	Val	Ser	Leu	Phe	Tyr	Gly	Thr	Ile	Ile	Gly	Leu	245	250	255	
Tyr	Leu	Cys	Pro	Ala	Gly	Asn	Asn	Ser	Thr	Val	Lys	Glu	Met	Val	Met	260	265	270	
Ala	Met	Met	Tyr	Thr	Val	Val	Thr	Pro	Met	Leu	Asn	Pro	Phe	Ile	Tyr	275	280	285	

Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Val Ile Cys  
 290 295 300

Ser Met Lys Ile Thr Leu  
 305 310

<210> 76  
 <211> 327  
 <212> PRT  
 <213> Rattus sp. I7

<400> 76

Met Glu Arg Arg Asn His Ser Gly Arg Val Ser Glu Phe Val Leu Leu  
 1 5 10 15

Gly Phe Pro Ala Pro Ala Pro Leu Arg Val Leu Leu Phe Phe Leu Ser  
 20 25 30

Leu Leu Asp Tyr Val Leu Val Leu Thr Glu Asn Met Leu Ile Ile Ile  
 35 40 45

Ala Ile Arg Asn His Pro Thr Leu His Lys Pro Met Tyr Phe Phe Leu  
 50 55 60

Ala Asn Met Ser Phe Leu Glu Ile Trp Tyr Val Thr Val Thr Ile Pro  
 65 70 75 80

Lys Met Leu Ala Gly Phe Ile Gly Ser Lys Glu Asn His Gly Gln Leu  
 85 90 95

Ile Ser Phe Glu Ala Cys Met Thr Gln Leu Tyr Phe Phe Leu Gly Leu  
 100 105 110

Gly Cys Thr Glu Cys Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr  
 115 120 125

Val Ala Ile Cys His Pro Leu His Tyr Pro Val Ile Val Ser Ser Arg  
 130 135 140

Leu Cys Val Gln Met Ala Ala Gly Ser Trp Ala Gly Gly Phe Gly Ile  
 145 150 155 160

Ser Met Val Lys Val Phe Leu Ile Ser Arg Leu Ser Tyr Cys Gly Pro  
 165 170 175

Asn Thr Ile Asn His Phe Phe Cys Asp Val Ser Pro Leu Leu Asn Leu  
 180 185 190

Ser Cys Thr Asp Met Ser Thr Ala Glu Leu Thr Asp Phe Val Leu Ala  
 195 200 205

Ile Phe Ile Leu Leu Gly Pro Leu Ser Val Thr Gly Ala Ser Tyr Met  
 210 215 220

Ala Ile Thr Gly Ala Val Met Arg Ile Pro Ser Ala Ala Gly Arg His  
 225 230 235 240

Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Ile Ile Phe





Asn Glu Leu Met Ile His Ile Met Gly Val Ile Ile Ile Val Ile Pro  
 195 200 205  
 Phe Val Leu Ile Val Ile Ser Tyr Ala Lys Ile Ile Ser Ser Ile Leu  
 210 215 220  
 Lys Val Pro Ser Thr Gln Ser Ile His Lys Val Phe Ser Thr Cys Gly  
 225 230 235 240  
 Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu  
 245 250 255  
 Tyr Leu Cys Pro Ser Gly Asp Asn Phe Ser Leu Lys Gly Ser Ala Met  
 260 265 270  
 Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr  
 275 280 285  
 Ser Leu Arg Asn Arg Asp Met Lys Gln Ala Leu Ile Arg Val Thr Cys  
 290 295 300  
 Ser Lys Lys Ile Ser Leu Pro Trp  
 305 310

<210> 78  
 <211> 314  
 <212> PRT  
 <213> Rattus sp. I9

<400> 78

Met Thr Arg Arg Asn Gln Thr Ala Ile Ser Gln Phe Phe Leu Leu Gly  
 1 5 10 15  
 Leu Pro Phe Pro Pro Glu Tyr Gln His Leu Phe Tyr Ala Leu Phe Leu  
 20 25 30  
 Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Ile Ile Ile Ile Leu  
 35 40 45  
 Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser  
 50 55 60  
 Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys  
 65 70 75 80  
 Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly  
 85 90 95  
 Cys Leu Ala Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn  
 100 105 110  
 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe  
 115 120 125  
 Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu  
 130 135 140

Val	Val	Leu	Ser	Trp	Val	Leu	Thr	Thr	Phe	His	Ala	Met	Leu	His	Thr
145					150					155					160
Leu	Leu	Met	Ala	Arg	Leu	Ser	Phe	Cys	Glu	Asp	Ser	Val	Ile	Pro	His
				165					170					175	
Tyr	Phe	Cys	Asp	Met	Ser	Thr	Leu	Leu	Lys	Val	Ala	Cys	Ser	Asp	Thr
			180					185					190		
His	Asp	Asn	Glu	Leu	Ala	Ile	Phe	Ile	Leu	Gly	Gly	Pro	Ile	Val	Val
			195				200					205			
Leu	Pro	Phe	Leu	Leu	Ile	Ile	Val	Ser	Tyr	Ala	Arg	Ile	Val	Ser	Ser
	210					215					220				
Ile	Phe	Lys	Val	Pro	Ser	Ser	Gln	Ser	Ile	His	Lys	Ala	Phe	Ser	Thr
225					230					235					240
Cys	Gly	Ser	His	Leu	Ser	Val	Val	Ser	Leu	Phe	Tyr	Gly	Thr	Val	Ile
				245					250					255	
Gly	Leu	Tyr	Leu	Cys	Pro	Ser	Ala	Asn	Asn	Ser	Thr	Val	Lys	Glu	Thr
			260					265					270		
Val	Met	Ser	Leu	Met	Tyr	Thr	Met	Val	Thr	Pro	Met	Leu	Asn	Pro	Phe
			275				280					285			
Ile	Tyr	Ser	Leu	Arg	Asn	Arg	Asp	Ile	Lys	Asp	Ala	Leu	Glu	Lys	Ile
	290					295					300				
Met	Cys	Lys	Lys	Gln	Ile	Pro	Ser	Phe	Leu						
305					310										

<210> 79  
 <211> 312  
 <212> PRT  
 <213> Rattus sp. I14

<400> 79

Met	Thr	Gly	Asn	Asn	Gln	Thr	Leu	Ile	Leu	Glu	Phe	Leu	Leu	Leu	Gly
1				5					10					15	
Leu	Pro	Ile	Pro	Ser	Glu	Tyr	His	Leu	Leu	Phe	Tyr	Ala	Leu	Phe	Leu
			20					25					30		
Ala	Met	Tyr	Leu	Thr	Ile	Ile	Leu	Gly	Asn	Leu	Leu	Ile	Ile	Val	Leu
			35				40					45			
Val	Arg	Leu	Asp	Ser	His	Leu	His	Met	Pro	Met	Tyr	Leu	Phe	Leu	Ser
	50					55					60				
Asn	Leu	Ser	Phe	Ser	Asp	Leu	Cys	Phe	Ser	Ser	Val	Thr	Met	Pro	Lys
65					70					75					80
Leu	Leu	Gln	Asn	Met	Gln	Ser	Gln	Val	Pro	Ser	Ile	Ser	Tyr	Thr	Gly
				85					90					95	
Cys	Leu	Thr	Gln	Leu	Tyr	Phe	Phe	Met	Val	Phe	Gly	Asp	Met	Glu	Ser

Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe  
 115 120 125  
 Pro Leu Arg Tyr Thr Thr Ile Met Ser Thr Lys Phe Cys Ala Ser Leu  
 130 135 140  
 Val Leu Leu Leu Trp Met Leu Thr Met Thr His Ala Leu Leu His Thr  
 145 150 155 160  
 Leu Leu Ile Ala Arg Leu Ser Phe Cys Glu Lys Asn Val Ile Leu His  
 165 170 175  
 Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Ile  
 180 185 190  
 Tyr Val Asn Glu Leu Met Ile Tyr Ile Leu Gly Gly Leu Ile Ile Ile  
 195 200 205  
 Ile Pro Phe Leu Leu Ile Val Met Ser Tyr Val Arg Ile Phe Phe Ser  
 210 215 220  
 Ile Leu Lys Phe Pro Ser Ile Gln Asp Ile Tyr Lys Val Phe Ser Thr  
 225 230 235 240  
 Cys Gly Ser His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr Ile Phe  
 245 250 255  
 Gly Ile Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Lys Glu Ile  
 260 265 270  
 Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe  
 275 280 285  
 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Val  
 290 295 300  
 Ile Cys Thr Lys Lys Ile Ser Leu  
 305 310

<210> 80  
 <211> 314  
 <212> PRT  
 <213> Rattus sp. I15

<400> 80

Met Thr Glu Glu Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Leu Phe  
 1 5 10 15  
 Leu Pro Ile Pro Ser Glu His Gln His Val Phe Tyr Ala Leu Phe Leu  
 20 25 30  
 Ser Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Ile Leu  
 35 40 45  
 Ile His Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser  
 50 55 60

Asn	Leu	Ser	Phe	Ser	Asp	Leu	Cys	Phe	Ser	Ser	Val	Thr	Met	Pro	Lys	65	70	75	80
Leu	Leu	Gln	Asn	Met	Gln	Ser	Gln	Val	Pro	Ser	Ile	Pro	Phe	Ala	Gly	85	90	95	
Cys	Leu	Thr	Gln	Leu	Tyr	Phe	Tyr	Leu	Tyr	Phe	Ala	Asp	Leu	Glu	Ser	100	105	110	
Phe	Leu	Leu	Val	Ala	Met	Ala	Tyr	Asp	Arg	Tyr	Val	Ala	Ile	Cys	Phe	115	120	125	
Pro	Leu	His	Tyr	Met	Ser	Ile	Met	Ser	Pro	Lys	Leu	Cys	Val	Ser	Leu	130	135	140	
Val	Val	Leu	Ser	Trp	Val	Leu	Thr	Thr	Phe	His	Ala	Met	Leu	His	Thr	145	150	155	160
Leu	Leu	Met	Ala	Arg	Leu	Ser	Phe	Cys	Ala	Asp	Asn	Met	Ile	Pro	His	165	170	175	
Phe	Phe	Cys	Asp	Ile	Ser	Pro	Leu	Leu	Lys	Leu	Ser	Cys	Ser	Asp	Thr	180	185	190	
His	Val	Asn	Glu	Leu	Val	Ile	Phe	Val	Met	Gly	Gly	Leu	Val	Ile	Val	195	200	205	
Ile	Pro	Phe	Val	Leu	Ile	Ile	Val	Ser	Tyr	Ala	Arg	Val	Val	Ala	Ser	210	215	220	
Ile	Leu	Lys	Val	Pro	Ser	Val	Arg	Gly	Ile	His	Lys	Ile	Phe	Ser	Thr	225	230	235	240
Cys	Gly	Ser	His	Leu	Ser	Val	Val	Ser	Leu	Phe	Tyr	Gly	Thr	Ile	Ile	245	250	255	
Gly	Leu	Tyr	Leu	Cys	Pro	Ser	Ala	Asn	Asn	Ser	Thr	Val	Lys	Glu	Thr	260	265	270	
Val	Met	Ala	Met	Met	Tyr	Thr	Val	Val	Thr	Pro	Met	Leu	Asn	Pro	Phe	275	280	285	
Ile	Tyr	Ser	Leu	Arg	Asn	Arg	Asp	Met	Lys	Glu	Ala	Leu	Ile	Arg	Val	290	295	300	
Leu	Cys	Lys	Lys	Lys	Ile	Thr	Phe	Cys	Leu							305	310		